Release notes for ENDF/B Development n-024_Cr_053 evaluation

April 26, 2017

- `checkr` Warnings:

  1. A previous error halted parsing of the current section
     MAT=2434, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=2434, MF= 1, MT=451
   SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      469 TO     571
```

- `checkr` Errors:

  1. A variable is outside the allowed ENDF range
     MAT=2434, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=2434, MF= 1, MT=451
   MOD =     4 OUT OF RANGE     0 -     0           RECORD NUMBER     469
```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 2, MT=151
   SECTION  2/151 NOT IN DIRECTORY                 RECORD NUMBER     573
```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=  1
   SECTION  3/  1 NOT IN DIRECTORY                 RECORD NUMBER     931
```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=  2
   SECTION  3/  2 NOT IN DIRECTORY                 RECORD NUMBER    1655
```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 3, MT= 3 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=  3
   SECTION  3/  3 NOT IN DIRECTORY                 RECORD NUMBER    2379
```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=  4
   SECTION  3/  4 NOT IN DIRECTORY                 RECORD NUMBER    2455
```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=2434, MF= 3, MT= 5 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=  5
   SECTION  3/  5 NOT IN DIRECTORY                 RECORD NUMBER    2475
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 16
   SECTION  3/ 16 NOT IN DIRECTORY                 RECORD NUMBER    2530
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 22 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 22
   SECTION  3/ 22 NOT IN DIRECTORY                 RECORD NUMBER    2539
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 28
   SECTION  3/ 28 NOT IN DIRECTORY                 RECORD NUMBER    2546
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 51
   SECTION  3/ 51 NOT IN DIRECTORY                 RECORD NUMBER    2553
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 52
   SECTION  3/ 52 NOT IN DIRECTORY                 RECORD NUMBER    2569
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 53
   SECTION  3/ 53 NOT IN DIRECTORY                 RECORD NUMBER    2584
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 54
   SECTION  3/ 54 NOT IN DIRECTORY                 RECORD NUMBER    2599
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 55
   SECTION  3/ 55 NOT IN DIRECTORY                 RECORD NUMBER    2613
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 56
   SECTION  3/ 56 NOT IN DIRECTORY                 RECORD NUMBER    2627
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 57
   SECTION  3/ 57 NOT IN DIRECTORY                 RECORD NUMBER    2641
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 58
   SECTION  3/ 58 NOT IN DIRECTORY                 RECORD NUMBER    2654
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 59
   SECTION  3/ 59 NOT IN DIRECTORY                 RECORD NUMBER    2667
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 60
   SECTION  3/ 60 NOT IN DIRECTORY                 RECORD NUMBER    2680
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 61
   SECTION  3/ 61 NOT IN DIRECTORY                 RECORD NUMBER    2693
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 62
   SECTION  3/ 62 NOT IN DIRECTORY                 RECORD NUMBER    2706
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 63
   SECTION  3/ 63 NOT IN DIRECTORY                 RECORD NUMBER    2719
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT= 91
   SECTION  3/ 91 NOT IN DIRECTORY                 RECORD NUMBER    2732
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=102
   SECTION  3/102 NOT IN DIRECTORY                 RECORD NUMBER    2745
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=103
   SECTION  3/103 NOT IN DIRECTORY                 RECORD NUMBER    2758
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 3, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 3, MT=107
   SECTION  3/107 NOT IN DIRECTORY                 RECORD NUMBER    2771
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 4, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 4, MT=  2
   SECTION  4/  2 NOT IN DIRECTORY                 RECORD NUMBER    2788
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 5 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT=  5
   SECTION  6/  5 NOT IN DIRECTORY                 RECORD NUMBER    7038
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 16
   SECTION  6/ 16 NOT IN DIRECTORY                 RECORD NUMBER   19960
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 22 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 22
   SECTION  6/ 22 NOT IN DIRECTORY                RECORD NUMBER   20250
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 28
   SECTION  6/ 28 NOT IN DIRECTORY                RECORD NUMBER   20500
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 51
   SECTION  6/ 51 NOT IN DIRECTORY                RECORD NUMBER   20734
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 52
   SECTION  6/ 52 NOT IN DIRECTORY                RECORD NUMBER   20742
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 53
   SECTION  6/ 53 NOT IN DIRECTORY                RECORD NUMBER   20750
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 54
   SECTION  6/ 54 NOT IN DIRECTORY                RECORD NUMBER   20758
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 55
   SECTION  6/ 55 NOT IN DIRECTORY                RECORD NUMBER   20766
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 56
   SECTION  6/ 56 NOT IN DIRECTORY                RECORD NUMBER   20774
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 57
   SECTION  6/ 57 NOT IN DIRECTORY                RECORD NUMBER   20782
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 58
   SECTION  6/ 58 NOT IN DIRECTORY                RECORD NUMBER   20790
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 59
   SECTION  6/ 59 NOT IN DIRECTORY                RECORD NUMBER   20798
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 60
   SECTION  6/ 60 NOT IN DIRECTORY                RECORD NUMBER   20806
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 61
   SECTION  6/ 61 NOT IN DIRECTORY                RECORD NUMBER   20814
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 62
   SECTION  6/ 62 NOT IN DIRECTORY                RECORD NUMBER   20822
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 63
   SECTION  6/ 63 NOT IN DIRECTORY                RECORD NUMBER   20830
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT= 91
   SECTION  6/ 91 NOT IN DIRECTORY                RECORD NUMBER   20838
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT=103
   SECTION  6/103 NOT IN DIRECTORY                RECORD NUMBER   21953
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF= 6, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF= 6, MT=107
   SECTION  6/107 NOT IN DIRECTORY                RECORD NUMBER   22625
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 51
   SECTION 12/ 51 NOT IN DIRECTORY                RECORD NUMBER   23465
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 52
   SECTION 12/ 52 NOT IN DIRECTORY                RECORD NUMBER   23469
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 53
   SECTION 12/ 53 NOT IN DIRECTORY                RECORD NUMBER   23473
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 54
   SECTION 12/ 54 NOT IN DIRECTORY                RECORD NUMBER   23477
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 55
   SECTION 12/ 55 NOT IN DIRECTORY                RECORD NUMBER   23481
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 56
   SECTION 12/ 56 NOT IN DIRECTORY                RECORD NUMBER   23485
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 57
   SECTION 12/ 57 NOT IN DIRECTORY                 RECORD NUMBER   23489
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 58
   SECTION 12/ 58 NOT IN DIRECTORY                 RECORD NUMBER   23493
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 59
   SECTION 12/ 59 NOT IN DIRECTORY                 RECORD NUMBER   23497
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 60
   SECTION 12/ 60 NOT IN DIRECTORY                 RECORD NUMBER   23501
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 61
   SECTION 12/ 61 NOT IN DIRECTORY                 RECORD NUMBER   23505
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 62
   SECTION 12/ 62 NOT IN DIRECTORY                 RECORD NUMBER   23509
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT= 63
   SECTION 12/ 63 NOT IN DIRECTORY                 RECORD NUMBER   23513
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=12, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT=102
   SECTION 12/102 NOT IN DIRECTORY                 RECORD NUMBER   23518
```

63. Missing a gamma spectrum for continuum of gammas
MAT=2434, MF=12, MT=102 (1): No gamma spectrum

```
ERROR(S) FOUND IN MAT=2434, MF=12, MT=102
   CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 51
   SECTION 14/ 51 NOT IN DIRECTORY                RECORD NUMBER   23889
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 52
   SECTION 14/ 52 NOT IN DIRECTORY                RECORD NUMBER   23891
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 53
   SECTION 14/ 53 NOT IN DIRECTORY                RECORD NUMBER   23893
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 54
   SECTION 14/ 54 NOT IN DIRECTORY                RECORD NUMBER   23895
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 55
   SECTION 14/ 55 NOT IN DIRECTORY                RECORD NUMBER   23897
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 56
   SECTION 14/ 56 NOT IN DIRECTORY                RECORD NUMBER   23899
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 57
   SECTION 14/ 57 NOT IN DIRECTORY                RECORD NUMBER   23901
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 58
   SECTION 14/ 58 NOT IN DIRECTORY                RECORD NUMBER   23903
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 59
   SECTION 14/ 59 NOT IN DIRECTORY                RECORD NUMBER   23905
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 60
   SECTION 14/ 60 NOT IN DIRECTORY                RECORD NUMBER   23907
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 61
   SECTION 14/ 61 NOT IN DIRECTORY                RECORD NUMBER   23909
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 62
   SECTION 14/ 62 NOT IN DIRECTORY                RECORD NUMBER   23911
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT= 63
   SECTION 14/ 63 NOT IN DIRECTORY                RECORD NUMBER   23913
```

77. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=14, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=14, MT=102
   SECTION 14/102 NOT IN DIRECTORY                RECORD NUMBER   23915
```

78. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=15, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=15, MT=102
   SECTION 15/102 NOT IN DIRECTORY                RECORD NUMBER   23918
```

79. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=32, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=32, MT=151
   SECTION 32/151 NOT IN DIRECTORY                RECORD NUMBER   24156
```

80. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=  1
   SECTION 33/  1 NOT IN DIRECTORY                 RECORD NUMBER  116477
```

81. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=  2
   SECTION 33/  2 NOT IN DIRECTORY                 RECORD NUMBER  116495
```

82. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 3 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=  3
   SECTION 33/  3 NOT IN DIRECTORY                 RECORD NUMBER  116515
```

83. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=  4
   SECTION 33/  4 NOT IN DIRECTORY                 RECORD NUMBER  116529
```

84. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 16
   SECTION 33/ 16 NOT IN DIRECTORY                 RECORD NUMBER  116539
```

85. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 22 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 22
   SECTION 33/ 22 NOT IN DIRECTORY                 RECORD NUMBER  116554
```

86. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 28
   SECTION 33/ 28 NOT IN DIRECTORY                 RECORD NUMBER  116569
```

87. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 51
   SECTION 33/ 51 NOT IN DIRECTORY                 RECORD NUMBER  116584
```

88. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 52
   SECTION 33/ 52 NOT IN DIRECTORY                RECORD NUMBER  116599
```

89. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 53
   SECTION 33/ 53 NOT IN DIRECTORY                RECORD NUMBER  116614
```

90. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 54
   SECTION 33/ 54 NOT IN DIRECTORY                RECORD NUMBER  116629
```

91. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 55 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 55
   SECTION 33/ 55 NOT IN DIRECTORY                RECORD NUMBER  116644
```

92. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 56 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 56
   SECTION 33/ 56 NOT IN DIRECTORY                RECORD NUMBER  116659
```

93. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 57 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 57
   SECTION 33/ 57 NOT IN DIRECTORY                RECORD NUMBER  116674
```

94. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 58 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 58
   SECTION 33/ 58 NOT IN DIRECTORY                RECORD NUMBER  116689
```

95. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 59 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 59
   SECTION 33/ 59 NOT IN DIRECTORY                RECORD NUMBER  116704
```

96. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 60 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 60
   SECTION 33/ 60 NOT IN DIRECTORY                RECORD NUMBER  116719
```

97. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 61 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 61
   SECTION 33/ 61 NOT IN DIRECTORY                RECORD NUMBER  116734
```

98. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 62 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 62
   SECTION 33/ 62 NOT IN DIRECTORY                RECORD NUMBER  116749
```

99. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 63 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 63
   SECTION 33/ 63 NOT IN DIRECTORY                RECORD NUMBER  116764
```

100. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT= 91
   SECTION 33/ 91 NOT IN DIRECTORY                RECORD NUMBER  116779
```

101. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=102
   SECTION 33/102 NOT IN DIRECTORY                RECORD NUMBER  116792
```

102. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=103
   SECTION 33/103 NOT IN DIRECTORY                RECORD NUMBER  116805
```

103. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=2434, MF=33, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=2434, MF=33, MT=107
   SECTION 33/107 NOT IN DIRECTORY                RECORD NUMBER  116822
```

- `psyche` Warnings:

1. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 2.58956E+04 EV. THE GAMMA WIDTH 3.72310E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  2.58956E+04 EV. THE GAMMA WIDTH  3.72310E-01 DEVIATES TOO MUCH FROM THE AV
```

2. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 7.42983E+04 EV. THE GAMMA WIDTH 3.32771E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  7.42983E+04 EV. THE GAMMA WIDTH  3.32771E-01 DEVIATES TOO MUCH FROM THE AV
```

3. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 1.95900E+05 EV. THE GAMMA WIDTH 2.59414E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  1.95900E+05 EV. THE GAMMA WIDTH  2.59414E-01 DEVIATES TOO MUCH FROM THE AV
```

4. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 2.64530E+05 EV. THE GAMMA WIDTH 2.18806E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  2.64530E+05 EV. THE GAMMA WIDTH  2.18806E-01 DEVIATES TOO MUCH FROM THE AV
```

5. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 2.92278E+05 EV. THE GAMMA WIDTH 2.01419E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  2.92278E+05 EV. THE GAMMA WIDTH  2.01419E-01 DEVIATES TOO MUCH FROM THE AV
```

6. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 4.09402E+05 EV. THE GAMMA WIDTH 4.05209E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  4.09402E+05 EV. THE GAMMA WIDTH  4.05209E+00 DEVIATES TOO MUCH FROM THE AV
```

7. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 4.79635E+05 EV. THE GAMMA WIDTH 4.15090E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  4.79635E+05 EV. THE GAMMA WIDTH  4.15090E+00 DEVIATES TOO MUCH FROM THE AV
```

8. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 4.92208E+05 EV. THE GAMMA WIDTH 2.58181E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  4.92208E+05 EV. THE GAMMA WIDTH  2.58181E-01 DEVIATES TOO MUCH FROM THE AV
```

9. Gamma width not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 0 / AT RESONANCE ENERGY 5.41701E+05 EV. THE GAMMA WIDTH 4.05538E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.20062E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  0
                AT RESONANCE ENERGY  5.41701E+05 EV. THE GAMMA WIDTH  4.05538E+00 DEVIATES TOO MUCH FROM THE AV
```

10. Gamma width not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.29537E+04 EV. THE GAMMA WIDTH 1.45709E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.29537E+04 EV. THE GAMMA WIDTH  1.45709E-01 DEVIATES TOO MUCH FROM THE AV
```

11. Gamma width not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.46570E+04 EV. THE GAMMA WIDTH 3.08084E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.46570E+04 EV. THE GAMMA WIDTH  3.08084E-01 DEVIATES TOO MUCH FROM THE AV
```

12. Gamma width not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE

ENERGY 1.60286E+04 EV. THE GAMMA WIDTH 2.86473E-02 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.60286E+04 EV. THE GAMMA WIDTH  2.86473E-02 DEVIATES TOO MUCH FROM THE AV
```

13. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.43324E+04 EV. THE GAMMA WIDTH 2.81579E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.43324E+04 EV. THE GAMMA WIDTH  2.81579E-01 DEVIATES TOO MUCH FROM THE AV
```

14. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 3.15923E+04 EV. THE GAMMA WIDTH 2.76403E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  3.15923E+04 EV. THE GAMMA WIDTH  2.76403E-01 DEVIATES TOO MUCH FROM THE AV
```

15. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 3.21528E+04 EV. THE GAMMA WIDTH 2.19356E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  3.21528E+04 EV. THE GAMMA WIDTH  2.19356E-01 DEVIATES TOO MUCH FROM THE AV
```

16. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 3.50288E+04 EV. THE GAMMA WIDTH 3.09382E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  3.50288E+04 EV. THE GAMMA WIDTH  3.09382E-01 DEVIATES TOO MUCH FROM THE AV
```

17. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.32797E+04 EV. THE GAMMA WIDTH 2.36468E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.32797E+04 EV. THE GAMMA WIDTH  2.36468E-01 DEVIATES TOO MUCH FROM THE AV
```

18. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 6.64594E+04 EV. THE GAMMA WIDTH 2.18456E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  6.64594E+04 EV. THE GAMMA WIDTH  2.18456E-01 DEVIATES TOO MUCH FROM THE AV
```

19. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 6.96900E+04 EV. THE GAMMA WIDTH 2.18241E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  6.96900E+04 EV. THE GAMMA WIDTH  2.18241E-01 DEVIATES TOO MUCH FROM THE AV
```

20. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.00037E+05 EV. THE GAMMA WIDTH 2.86580E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.00037E+05 EV. THE GAMMA WIDTH  2.86580E-01 DEVIATES TOO MUCH FROM THE AV
```

21. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.41841E+05 EV. THE GAMMA WIDTH 3.38140E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.41841E+05 EV. THE GAMMA WIDTH  3.38140E-01 DEVIATES TOO MUCH FROM THE AV
```

22. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.59471E+05 EV. THE GAMMA WIDTH 1.77392E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.59471E+05 EV. THE GAMMA WIDTH  1.77392E-01 DEVIATES TOO MUCH FROM THE AV
```

23. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.68994E+05 EV. THE GAMMA WIDTH 1.65636E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.68994E+05 EV. THE GAMMA WIDTH  1.65636E-01 DEVIATES TOO MUCH FROM THE AV
```

24. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.81073E+05 EV. THE GAMMA WIDTH 2.77229E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.81073E+05 EV. THE GAMMA WIDTH  2.77229E-01 DEVIATES TOO MUCH FROM THE AV
```

25. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 1.85562E+05 EV. THE GAMMA WIDTH 3.22183E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  1.85562E+05 EV. THE GAMMA WIDTH  3.22183E-01 DEVIATES TOO MUCH FROM THE AV
```

26. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.01870E+05 EV. THE GAMMA WIDTH 3.36646E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.01870E+05 EV. THE GAMMA WIDTH  3.36646E-01 DEVIATES TOO MUCH FROM THE AV
```

27. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.09323E+05 EV. THE GAMMA WIDTH 2.85995E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.09323E+05 EV. THE GAMMA WIDTH  2.85995E-01 DEVIATES TOO MUCH FROM THE AV
```

28. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.14065E+05 EV. THE GAMMA WIDTH 1.26216E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.14065E+05 EV. THE GAMMA WIDTH  1.26216E-01 DEVIATES TOO MUCH FROM THE AV
```

29. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE

ENERGY 2.15331E+05 EV. THE GAMMA WIDTH 1.99833E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.15331E+05 EV. THE GAMMA WIDTH  1.99833E-01 DEVIATES TOO MUCH FROM THE AV
```

30. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.15855E+05 EV. THE GAMMA WIDTH 2.35328E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.15855E+05 EV. THE GAMMA WIDTH  2.35328E-01 DEVIATES TOO MUCH FROM THE AV
```

31. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.21819E+05 EV. THE GAMMA WIDTH 4.46069E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.21819E+05 EV. THE GAMMA WIDTH  4.46069E+00 DEVIATES TOO MUCH FROM THE AV
```

32. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.21943E+05 EV. THE GAMMA WIDTH 7.84024E-04 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.21943E+05 EV. THE GAMMA WIDTH  7.84024E-04 DEVIATES TOO MUCH FROM THE AV
```

33. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.32258E+05 EV. THE GAMMA WIDTH 2.71583E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.32258E+05 EV. THE GAMMA WIDTH  2.71583E-01 DEVIATES TOO MUCH FROM THE AV
```

34. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.34135E+05 EV. THE GAMMA WIDTH 3.14346E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.34135E+05 EV. THE GAMMA WIDTH  3.14346E-01 DEVIATES TOO MUCH FROM THE AV
```

35. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.37337E+05 EV. THE GAMMA WIDTH 3.13850E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.37337E+05 EV. THE GAMMA WIDTH  3.13850E-01 DEVIATES TOO MUCH FROM THE AV
```

36. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.39407E+05 EV. THE GAMMA WIDTH 1.35011E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.39407E+05 EV. THE GAMMA WIDTH  1.35011E-01 DEVIATES TOO MUCH FROM THE AV
```

37. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.58777E+05 EV. THE GAMMA WIDTH 2.51913E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.58777E+05 EV. THE GAMMA WIDTH  2.51913E-01 DEVIATES TOO MUCH FROM THE AV
```

38. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.82235E+05 EV. THE GAMMA WIDTH 2.61310E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.82235E+05 EV. THE GAMMA WIDTH  2.61310E-01 DEVIATES TOO MUCH FROM THE AV
```

39. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.82568E+05 EV. THE GAMMA WIDTH 1.54940E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.82568E+05 EV. THE GAMMA WIDTH  1.54940E-01 DEVIATES TOO MUCH FROM THE AV
```

40. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 2.91650E+05 EV. THE GAMMA WIDTH 3.35570E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  2.91650E+05 EV. THE GAMMA WIDTH  3.35570E-01 DEVIATES TOO MUCH FROM THE AV
```

41. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 3.63780E+05 EV. THE GAMMA WIDTH 1.90538E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  3.63780E+05 EV. THE GAMMA WIDTH  1.90538E-01 DEVIATES TOO MUCH FROM THE AV
```

42. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 3.67998E+05 EV. THE GAMMA WIDTH 2.98923E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  3.67998E+05 EV. THE GAMMA WIDTH  2.98923E-01 DEVIATES TOO MUCH FROM THE AV
```

43. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.00763E+05 EV. THE GAMMA WIDTH 2.44497E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.00763E+05 EV. THE GAMMA WIDTH  2.44497E-01 DEVIATES TOO MUCH FROM THE AV
```

44. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.11279E+05 EV. THE GAMMA WIDTH 1.66547E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.11279E+05 EV. THE GAMMA WIDTH  1.66547E-01 DEVIATES TOO MUCH FROM THE AV
```

45. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.36332E+05 EV. THE GAMMA WIDTH 6.82769E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.36332E+05 EV. THE GAMMA WIDTH  6.82769E+00 DEVIATES TOO MUCH FROM THE AV
```

46. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE

ENERGY 4.47380E+05 EV. THE GAMMA WIDTH 5.50387E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.47380E+05 EV. THE GAMMA WIDTH  5.50387E+00 DEVIATES TOO MUCH FROM THE AV
```

47. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.48175E+05 EV. THE GAMMA WIDTH 4.10821E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.48175E+05 EV. THE GAMMA WIDTH  4.10821E+00 DEVIATES TOO MUCH FROM THE AV
```

48. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.59158E+05 EV. THE GAMMA WIDTH 4.27202E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.59158E+05 EV. THE GAMMA WIDTH  4.27202E+00 DEVIATES TOO MUCH FROM THE AV
```

49. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.67721E+05 EV. THE GAMMA WIDTH 3.95541E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.67721E+05 EV. THE GAMMA WIDTH  3.95541E+00 DEVIATES TOO MUCH FROM THE AV
```

50. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 4.93007E+05 EV. THE GAMMA WIDTH 1.67052E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  4.93007E+05 EV. THE GAMMA WIDTH  1.67052E-01 DEVIATES TOO MUCH FROM THE AV
```

51. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 5.17568E+05 EV. THE GAMMA WIDTH 3.15272E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  5.17568E+05 EV. THE GAMMA WIDTH  3.15272E+00 DEVIATES TOO MUCH FROM THE AV
```

52. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 5.21593E+05 EV. THE GAMMA WIDTH 3.56909E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  5.21593E+05 EV. THE GAMMA WIDTH  3.56909E+00 DEVIATES TOO MUCH FROM THE AV
```

53. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 5.27102E+05 EV. THE GAMMA WIDTH 2.15918E-01 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  5.27102E+05 EV. THE GAMMA WIDTH  2.15918E-01 DEVIATES TOO MUCH FROM THE AV
```

54. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 5.29000E+05 EV. THE GAMMA WIDTH 3.55721E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  5.29000E+05 EV. THE GAMMA WIDTH  3.55721E+00 DEVIATES TOO MUCH FROM THE AV
```

55. Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 53. L = 1 / AT RESONANCE ENERGY 5.31380E+05 EV. THE GAMMA WIDTH 5.04219E+00 DEVIATES TOO MUCH FROM THE AVERAGE 1.03060E+00 (0): Gamma width

```
FILE  2
   SECTION 151
        ISOTOPE MASS =  53. L =  1
                AT RESONANCE ENERGY  5.31380E+05 EV. THE GAMMA WIDTH  5.04219E+00 DEVIATES TOO MUCH FROM THE AV
```

56. Non-threshold reaction with Q value differing from PSYCHE's expectations
FILE 3 / SECTION 107 / THE CALCULATED Q 2.01714E+06 DISSAGREES WITH THE GIVEN Q 1.79500E+06 (0): Iffy Q

```
FILE  3
   SECTION 107
            THE CALCULATED Q  2.01714E+06 DISSAGREES WITH THE GIVEN Q  1.79500E+06
```

- `fudge-4.0` Warnings:

1. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: nonelastic (Error # 0): CS Sum.

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 97.13%
```

2. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (total): / Form 'eval': / Component 4 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Cr53): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n + Cr53): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (nonelastic): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Cr52 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Cr52 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Cr52 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'2'] + Cr52 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Ti49 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Ti49 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Ti49 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 5 (n + He4 + Ti49 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + V52 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + V52 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + V52 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 6 (n + H1 + V52 + gamma): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Cr53_e1): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

24. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Cr53_e1): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

25. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Cr53_e1): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

26. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 7 (n + Cr53_e1): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

27. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Cr53_e2): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

28. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Cr53_e2): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

29. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Cr53_e2): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

30. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n + Cr53_e2): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

31. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Cr53_e3): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

32. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Cr53_e3): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

33. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Cr53_e3): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

34. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 9 (n + Cr53_e3): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

35. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 10 (n + Cr53_e4): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

36. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 10 (n + Cr53_e4): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

37. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 10 (n + Cr53_e4): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

38. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 10 (n + Cr53_e4): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

39. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + Cr53_e5): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

40. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + Cr53_e5): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

41. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + Cr53_e5): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

42. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + Cr53_e5): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

43. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Cr53_e6): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

44. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Cr53_e6): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

45. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Cr53_e6): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

46. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + Cr53_e6): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

47. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + Cr53_e7): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

48. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + Cr53_e7): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

49. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + Cr53_e7): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

50. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + Cr53_e7): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

51. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (n + Cr53_e8): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

52. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (n + Cr53_e8): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

53. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (n + Cr53_e8): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

54. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (n + Cr53_e8): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

55. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 (n + Cr53_e9): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

56. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 (n + Cr53_e9): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

57. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 (n + Cr53_e9): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

58. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 (n + Cr53_e9): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

59. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 (n + Cr53_e10): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

60. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 (n + Cr53_e10): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

61. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 (n + Cr53_e10): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

62. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 (n + Cr53_e10): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

63. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 17 (n + Cr53_e11): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

64. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 17 (n + Cr53_e11): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

65. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 17 (n + Cr53_e11): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

66. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 17 (n + Cr53_e11): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

67. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 (n + Cr53_e12): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

68. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 (n + Cr53_e12): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

69. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 (n + Cr53_e12): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

70. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 (n + Cr53_e12): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

71. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 (n + Cr53_e13): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

72. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 (n + Cr53_e13): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

73. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 (n + Cr53_e13): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

74. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 (n + Cr53_e13): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

75. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 20 (n + (Cr53_c ->Cr53 + gamma)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

76. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 20 (n + (Cr53_c ->Cr53 + gamma)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

77. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 20 (n + (Cr53_c ->Cr53 + gamma)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

78. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 21 (Cr54 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

79. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 21 (Cr54 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

80. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 21 (Cr54 + gamma): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

81. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 22 (H1 + (V53_s ->V53 + gamma)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

82. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 22 (H1 + (V53_s ->V53 + gamma)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

83. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 22 (H1 + (V53_s -> V53 + gamma)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

84. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 22 (H1 + (V53_s -> V53 + gamma)): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

85. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 23 (He4 + (Ti50_s -> Ti50 + gamma)): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

86. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 23 (He4 + (Ti50_s -> Ti50 + gamma)): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

87. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 23 (He4 + (Ti50_s -> Ti50 + gamma)): / Form 'eval': / Component 2 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

88. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 23 (He4 + (Ti50_s -> Ti50 + gamma)): / Form 'eval': / Component 3 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

- `fudge-4.0` Errors:

1. Calculated and tabulated Q values disagree.
reaction label 15: n[multiplicity:'2'] + Cr52 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -7516522.915336609 eV vs -7.94e6 eV!
```

2. Calculated and tabulated Q values disagree.
reaction label 16: n + H1 + V52 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -11212634.70957947 eV vs -1.1134e7 eV!
```

3. Calculated and tabulated Q values disagree.
   reaction label 17: Cr54 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 9847092.092170715 eV vs 9719090. eV!
```

4. Calculated and tabulated Q values disagree.
   reaction label 18: n + He4 + Ti49 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -9684715.636672974 eV vs -9.15e6 eV!
```

5. Calculated and tabulated Q values disagree.
   reaction label 19: H1 + (V53_s ->V53 + gamma) (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -2211598.518463135 eV vs -2.64e6 eV!
```

6. Calculated and tabulated Q values disagree.
   reaction label 20: He4 + (Ti50_s ->Ti50 + gamma) (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 697481.6401367188 eV vs 1.795e6 eV!
```

7. Multiplicity does not match sum of linked product multiplicities!
   multiplicitySum label 4: Cr54 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch

```
WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 50.27%
```

8. A summed covariance refers to another which refers back to the first which refers the second which refers to the first which refers to the ...
   (Error # 5): Cyclic

```
n-024_Cr_053.endf: WARNING: Cyclic dependency in summed covariances for sections /covarianceSuite/section[@label
```

- `njoy2012` Warnings:

1. Message comes from several resonance types that do not support the calculation of angular distributions. Some of them can be used if `Want_SAMRL_RM or Want_SAMRML_BW are true.`
   reconr...reconstruct pointwise cross sections in pendf format (0): RECONR/calculation of angular distribution not installed (0)

```
 ---message from rdf2bw---calculation of angular distribution not installed.
   samm max legendre order:  0
```

2. Evaluation has no unresolved resonance parameters given
   unresr...calculation of unresolved resonance cross sections (0): No URR

```
 ---message from unresr---mat 2434 has no unresolved parameters
                          copy as is to nout
```

3. Evaluation has no unresolved resonance parameters given
   purr...probabalistic unresolved calculation (0): No URR

```
 ---message from purr---mat 2434 has no unresolved parameters
                        copy as is to nout
```

4. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (0): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 9.629565E-12 with q.lt.0 for (n,x) at e  1.000000E-11 -> 1.000000E-11
```

5. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (1): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

6. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (2): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

7. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (3): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 2.118504E+01 with q.lt.0 for (n,x) at e  2.200000E+01 -> 2.134335E+01
```

8. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (4): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

9. There is bad Kalbach parameter (r(E) or otherwise)
   check...ace consistency check (5): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

10. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (6): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 2.503686E+01 with q.lt.0 for (n,x) at e  2.600000E+01 -> 2.526856E+01
```

11. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (7): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

12. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (8): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

13. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (9): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 2.696277E+01 with q.lt.0 for (n,x) at e  2.800000E+01 -> 2.723117E+01
```

14. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (10): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

15. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (11): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

16. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (12): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 3.370347E+01 with q.lt.0 for (n,x) at e  3.500000E+01 -> 3.410030E+01
```

17. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (13): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

18. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (14): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

19. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (15): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 3.851825E+01 with q.lt.0 for (n,x) at e  4.000000E+01 -> 3.900681E+01
```

20. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (16): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

21. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (17): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

22. There is bad Kalbach parameter (r(E) or otherwise)
    check...ace consistency check (18): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 6.740695E+01 with q.lt.0 for (n,x) at e  7.000000E+01 -> 6.820059E+01
```

23. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (19): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

24. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (20): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

25. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (21): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 7.703652E+01 with q.lt.0 for (n,x) at e  8.000000E+01 -> 7.801363E+01
```

26. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (22): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

27. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (23): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

28. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (24): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 8.185130E+01 with q.lt.0 for (n,x) at e  8.500000E+01 -> 8.193884E+01
```

29. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (25): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

30. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (26): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

31. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (27): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 8.666608E+01 with q.lt.0 for (n,x) at e  9.000000E+01 -> 8.684536E+01
```

32. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (28): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

33. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (29): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

34. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (30): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 9.148087E+01 with q.lt.0 for (n,x) at e  9.500000E+01 -> 9.175187E+01
```

35. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (31): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

36. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (32): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

37. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (33): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 9.629565E+01 with q.lt.0 for (n,x) at e  1.000000E+02 -> 9.665839E+01
```

38. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (34): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

39. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (35): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

40. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (36): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 1.348138E+02 with q.lt.0 for (n,x) at e  1.400000E+02 -> 1.349292E+02
```

41. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (37): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

42. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (38): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

43. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (39): ACER/check energy distributions (0)

```
 check energy distributions
   consis: ep.gt.epmax 1.444434E+02 with q.lt.0 for (n,x) at e  1.500000E+02 -> 1.447423E+02
```

44. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (40): ACER/check energy distributions (0)

```
 check energy distributions
   consis:   awr.lt.180---this is probably an error.
```

45. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (41): ACER/check energy distributions (0)

```
 check energy distributions
   consis: shifting eprimes greater than epmax and renorming the distribution
```

46. Only partial urr covariance data was given.
errorr...produce cross section covariances (0): ERRORR/resprx (5)

```
 ---message from resprx---mf2 nls=2, but mf32 nls=0
                          continue with partial urr covariance data
```

47. No scattering radius uncertainty given.
errorr...produce cross section covariances (1): ERRORR/rpxlc12 (0)

```
 ---message from rpxlc12---no scattering radius uncertainty
```

48. Generic warning message
errorr...produce cross section covariances (2): Warning

```
 ---message from rpxlc12---resonance parameter loop done               132.9s
```

49. Generic warning message
errorr...produce cross section covariances (3): Warning

```
 ---message from rpxlc12---sensitivity calculation continues           566.7s
```

50. Generic warning message
errorr...produce cross section covariances (4): Warning

```
 ---message from rpxlc12---sensitivity calculation completed          1237.4s
```

51. The number of coefficients is too big.
covr...process covariance data (1): COVR/matshd (3)

```
---message from matshd---  18 coefficients > 2
                          reset and continue
```

- `acelst` Warnings:

  1. The incident energy grid is not monotonic for this angular distribution
     0: Bad Ang. Dist.

```
ACELST WARNING - Processing Ang.Dist.MT         2
                 E-grid non-monotonic   2.000000000E+01 2.000000000E+01
```

- `xsectplotter` Errors:

  1. Exception IndexError was thrown
     /usr/local/lib/python2.7/site-packages/matplotlib-1.5.3-py2.7-linux-x86_64.egg/matplotlib/font_manager.py:2
     UserWarning: Matplotlib is building the font cache using fc-list. This may take a moment. (Error # 2): IndexError

```
IndexError: list index out of range
```